

ABSTRACT OF THE DISCLOSURE

A system for accessing a node of a private network includes an assigning portion for assigning external port values to respective network nodes based on information collected from the network nodes of the private network, and storing the assigned external port values; an exchanging portion for exchanging the external port values of the respective network nodes of private networks; and an address converting portion for converting the external port values into corresponding private IP addresses and internal port values when a network node of one private network accesses another network node of another private network by using the external port values of another network node of another private network. Accordingly, a network node of a private network without a global IP address becomes accessible.